

Remarks

Claims 2-10, 14-16, 21, 22, and 24 have been canceled without prejudice or disclaimer. Applicants reserve the right to file one or more continuation applications directed to the subject matter encompassed by all canceled claims. Upon entry of the present amendment, claims 1, 11, 12, 13, 17-20, 23, and 25-74 will be pending. Claims 25-74 have been added to expand the embodiments of the elected subject matter. The new claims are supported by the specification as filed. No new matter has been added.

More particularly, support for new claims 25, 26, 50, and 51 can be found, for example, at page 95, lines 4-29; and within Table 1A, page 88, row 3, indicated as cDNA clone HWBFY57, SEQ ID:65 (full-length and secreted polypeptide). Support for new claims 27 and 52 can be found, for example, at page 156, lines 1-8 (minus N-terminal methionine). Support for new claims 28, 29, 36, 37, 44, 45, 53, 54, 61, 62, 69, and 70 can be found, for example, at page 110 line 5 to page 111, line 23; page 127, lines 20-27; page 152, line 8 to page 153, line 32; and in Example 9, pages 257-259 (fusion polypeptides and Fc fusion polypeptides). Support for new claims 32, 40, 48, 57, 65, and 73 can be found, for example, in Example 23, pages 282-293 (formulation). Support for new claims 33, 41, 49, 58, 66, and 74 can be found, for example, at page 124, line 28 to page 127, line 19; and in Examples 5 to 8, pages 248-257 (host cells and protein production). Support for new claims 30, 38, 46, 55, 63, and 71 can be found, for example, at page 155, line 31 to page 156, line 1 (glycosylation). Support for new claims 34, 35, 59, and 60 can be found, for example, at page 95, line 31 to page 103, line 29 and page 31, lines 12-19 (polypeptides 90% and 95% identical to HWBFY57). Support for new claims 42, 43, 67, and 68 can be found, for example, at page 103, line 31 to page 105 line 2 (30 and 50 contiguous amino acids). Support for new claims 31, 39, 47, 56, 64, and 72 can be found, for example, at page 158 line 31 to page 160 line 15 (fused to polyethylene glycol).

Provisional Election With Traverse

On page 2 of the Office Action mailed August 4, 2004, the Examiner has separated the claims into eight (8) groups. The Examiner contends that the inventions are independent and/or distinct, each from the other, and thus, has required an election under 35 U.S.C. § 121. *See,*

Paper No. 080204, pages 2-3. The Examiner has further required election of a single polynucleotide or polypeptide sequence. *See*, Paper No. 080204, page 6, paragraphs 3-4.

In order to be fully responsive, Applicants hereby provisionally elect, *with traverse*, the subject matter of Group II, encompassing claims 11, 12, and 16, drawn to polypeptides. Moreover, Applicants elect the sequence corresponding to SEQ ID NO:65 and that corresponding to clone ID HWBFY57, for further prosecution. New claims 25-74 read on the elected sequences of Group II as cast by the Examiner.

With respect to the Examiner's division of the invention into eight groups and the reasons stated therefore, Applicants respectfully traverse. Assuming, *arguendo*, that patentably distinct inventions appear in a single application, restriction remains improper unless the examiner can show that the search and examination of these groups would entail a "serious burden." *See* M.P.E.P. § 803.

In the present situation, Applicants submit that a search of polynucleotide claims of the invention would provide useful information for examining claims directed to polynucleotides, methods of making recombinant cells using these polynucleotides, the polypeptides encoded by these polynucleotides, and methods of producing these polypeptides. In certain claims this is especially true because the polynucleotide sequence of these claims is defined in part by the polypeptide that the polynucleotide sequence encodes. Further, Applicants point out that in many if not most publications where a published nucleotide sequence is an open reading frame, the authors also include, as a matter of routine, the deduced amino acid sequence of the encoded polypeptide.

Similarly, a search of the polypeptide claims of the invention would clearly provide useful information for the examination of claims directed to antibodies either produced in response to or having affinity for the subject polypeptides. This is because antibodies are frequently defined by the antigens that they are produced in response to and the epitopes to which they bind. Moreover, in many publications where an antibody is described, the antigen that it was produced in response to is also described.

Further, searches of publications directed to polynucleotides and the use of those polynucleotides would clearly be overlapping. This is so because in many, if not most, publications which describe polynucleotides, these molecules are described by their function, characterization and/or expression profile. Thus, a search of polynucleotide claims would also

provide the Examiner with art directed to the manner in which the claimed polynucleotides could be used in diagnosing a pathological condition.

Moreover, searches of publications directed to polypeptides, activity and binding partners of the polypeptides, and the use of the polypeptides would clearly be overlapping. This is so because in many, if not most, publications which describe polypeptides, these molecules are described by their function. Thus, a search of polypeptide claims would also provide the Examiner with art directed to the manner in which the claimed polypeptides could be used to treat, prevent, or ameliorate medical conditions.

In view of the above, Applicants submit that the searches for polynucleotides, polypeptides, antibodies, and methods of diagnosing and treating disease states using the nucleic acids and proteins of the subject invention would clearly be overlapping. Accordingly, Applicants request that the Examiner reconsider and withdraw the restriction requirement and examine the subject matter of Groups 1-8 together in the present application.

Applicants retain the right to petition from the restriction requirement under 37 C.F.R. § 1.144.


Conclusion

Applicants respectfully request that the above-made amendments and remarks be entered and made of record in the file history of the instant application. The Examiner is invited to call the undersigned at the phone number provided below if any further action by Applicant would expedite the examination of this application.

If there are any fees due in connection with the filing of this paper, please charge the fees to our Deposit Account No. 08-3425.

Respectfully submitted,

Date: September 2, 2004


Kenley K. Hoover (Reg. No. 40,302)
Attorney for Applicants

Human Genome Sciences, Inc.
14200 Shady Grove Road
Rockville, MD 20850
(301) 610-5771 (phone)

KKH/PF/ba